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STEVENS DAVIS MILLER & MOSHER, LLP
1615 L STREET, NW
SUITE 850
WASHINGTON, DC 20036

EXAMINER	
YOUNG, JANELLE N	
ART UNIT	**PAPER NUMBER**
2618	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/528,120	NISHIO ET AL.	
	Examiner	Art Unit	
	Janelle N. Young	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 4-6, & 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Voyer (US Patent 2001/0027112).

As for claim 1, Voyer teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004), comprising the steps:

said number of mobile stations (Fig. 1:$\mathbf{SM_1}$, $\mathbf{SM_1}$, ... $\mathbf{SM_N}$), each transmitting first TPC command (Fig. 1-3:$\mathbf{TCP_1}$) for the input signal; which reads on claimed downlink common channel (Fig. 1-3:$\mathbf{e_1}$), and a second TPC command (Fig. 1-3:$\mathbf{TCP_2}$ and Para. 0002) for the input signal; which reads on claimed downlink dedicated channel (Fig. 1-3:$\mathbf{e_2}$) to a base station (Fig. 1-3:**SB**), through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035) and;

said base station (Fig. 1-3:**SB**) controlling transmit power of the input signal; which reads on claimed downlink common channel, based on said first TPC command (Fig. 1-3:**TCP_1**) and controlling transmit power of the input signal; which reads on claimed downlink dedicated channels, based on said second TPC command (Fig. 1-3:**TCP_2**) (Para. 0001, 0003, 0004, & 0007).

As for claim 4, Voyer teaches a method for controlling transmit power, wherein both said first TPC command (Fig. 1-3:**TCP_1**) and said second TPC command (Fig. 1-3:**TCP_2**) are transmitted in a same time slot (Para. 0002).

As for claim 5, Voyer teaches a method for controlling transmit power, wherein said base station increases a transmit power of the input signal; which reads on claimed downlink common channel, when at least one of a plurality of first commands transmitted from said plurality of mobile stations is a TPC command (Fig. 1-3:**TCP_1**) instructing an increase of the transmit power and decreases the transmit power of the input signal; which reads on claimed downlink common channel, when all of said plurality of first TPC commands transmitted from said plurality of mobile stations are TPC commands instructing a decrease of the transmit power (Abstract, Para. 0004, and 0007).

As for claim 6, Voyer teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-

3:$\mathbf{e_2}$) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004), comprising the steps:

said plurality of mobile stations each transmitting a TPC command (Fig. 1-3:$\mathbf{TCP_N}$) for the input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_N}$) a base station through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035); and

said base station controlling a transmit power of the input signal; which reads on claimed downlink dedicated channels, based on said TPC command (Fig. 1-3:$\mathbf{TCP_N}$) and controlling a transmit power of the downlink common channel at a transmit power equal to a maximum transmit power in a plurality of transmission powers of the downlink dedicated channels after transmit power control said maximum transmit power with an addition of an offset (Para. 0005, 0012, and 0014-0015).

As for claim 8, Voyer teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004), comprising the steps:

said plurality of mobile stations each transmitting a TPC command (Fig. 1-3:$\mathbf{TCP_N}$) for the input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_N}$) and a signal indicating an amount of increase of a transmit

power of the downlink common channel base station through an output signal; which reads on claimed uplink dedicated channel (Abstract, Para. 0004, and 0007); and

said base station controlling a transmit power of the downlink dedicated channels based on said TPC command and increasing a transmit power of the downlink common channel by said amount of increase of the transmit power.

As for claims 9 & 11, Voyer teaches a base station (Fig. 1-3:**SB**) apparatus carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to plurality of mobile stations concurrently with a transmit power control over downlink dedicated channels assigned individually to said plurality of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004), comprising:

a reception section (Fig. 1-3:**13**) that receives a first TPC command (Fig. 1-3:$\mathbf{TCP_1}$) for the input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_1}$), and a second TPC command (Fig. 1-3:$\mathbf{14_2}$) the downlink dedicated channel (Fig. 1-3:$\mathbf{e_2}$) through output signal; which reads on claimed uplink dedicated channel;

a first power control units; which reads on claimed control section that controls a transmit power (Fig. 1-3:$\mathbf{14_1}$), of the downlink common channel based on said first TPC command (Fig. 1-3:$\mathbf{TCP_1}$) and a second power control units; which reads on claimed control section that controls a transmit power (Fig. 1-3:$\mathbf{14_2}$), of the downlink dedicated channel based on said second TPC command (Fig. 1-3:$\mathbf{TCP_2}$) (Abstract and Para. 0004 & 0035).

Regarding claim 10, see explanation as set forth regarding claims 6 (method claim) because the claimed base station apparatus carrying out a transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004), would perform the method steps.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voyer (US Patent 2001/0027112) as applied to claims 1 and 6 above, and further in view of Nakano et al. (US Patent 5933782).

As for claims 2-3, Voyer teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$ of Voyer) assigned individually a number; which reads on claimed plurality, of

mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Voyer). A number of mobile stations (Fig. 1:**SM_1**, **SM_1**, ... **SM_N** of Voyer), each transmitting first TPC command (Fig. 1-3:**TCP_1** of Voyer) for the input signal; which reads on claimed downlink common channel (Fig. 1-3:**e_1** of Voyer), and a second TPC command (Fig. 1-3:**TCP_2** and Para. 0002 of Voyer) for the input signal; which reads on claimed downlink dedicated channel (Fig. 1-3:**e_2** of Voyer) to a base station (Fig. 1-3:**SB** of Voyer), through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035 of Voyer).

What Voyer does not explicitly teach is transmission intervals in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal.

However Nakano et al. teaches a method for controlling transmit power, wherein a transmission interval of the transmission power control; which reads on claimed first TPC command, longer than a transmission interval of the additional transmission power control; which reads on claimed second TPC command, (Fig. 6, 8-9, 13, 16, 21, & 24; Col. 3, lines 19-25; Col. 6, lines 44-50; Col. 7, lines 3-23; Col. 15, lines 54-63; and Col. 18, lines 19-35 of Nakano et al.) and wherein, one frame, the number of times the transmission power control; which reads on claimed first TPC command, transmitted smaller than the number of times the additional transmission power control; which reads on claimed second TPC command, is transmitted (Fig. 6, 8-9, 13, 16, 21, & 24; Col. 6,

lines 31-37; Col. 7, lines 3-23; Col. 9, lines 46-59; Col. 10, lines 31-40; Col. 15, lines 54-63; and Col. 18, lines 19-35 of Nakano et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a transmission interval of the transmission power control intervals and number of times the additional transmission power control, is transmitted, as taught by Nakano et al., in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Voyer).

The motivation of this combination would be the effect of the downlink transmission power control that can follow a variation in the propagation loss and control the frame error rate due to the timing intervals in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations (Col. Col 5, line 63-Col. 6, line 5; Col. 6, lines 32-36 & 44-50; Col. 9, lines 45-59; and Col. 10, lines 31-41 of Nakano et al.).

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Voyer (US Patent 2001/0027112) as applied to claims 1 and 6 above, and further in view of Sakoda et al. (US Patent 2003/0199275).

As for claim 7, Voyer teaches a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously

transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal; which reads on claimed downlink dedicated channels (Fig. 1-3:$\mathbf{e_2}$ of Voyer) assigned individually a number; which reads on claimed plurality, of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Voyer). A number of mobile stations (Fig. 1:$\mathbf{SM_1}$, $\mathbf{SM_1}$, ... $\mathbf{SM_N}$ of Voyer), each transmitting first TPC command (Fig. 1-3:$\mathbf{TCP_1}$ of Voyer) for the input signal; which reads on claimed downlink common channel (Fig. 1-3:$\mathbf{e_1}$ of Voyer), and a second TPC command (Fig. 1-3:$\mathbf{TCP_2}$ and Para. 0002 of Voyer) for the input signal; which reads on claimed downlink dedicated channel (Fig. 1-3:$\mathbf{e_2}$ of Voyer) to a base station (Fig. 1-3:**SB** of Voyer), through an output signal; which reads on claimed uplink dedicated channel (Abstract and Para. 0004 & 0035 of Voyer).

What Voyer does not explicitly teach is Negative Acknowledge (NAK) and/or Acknowledge (ACK) in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with transmit power control over input signal.

However Sakoda et al. teaches a method for controlling transmit power, wherein said plurality of mobile stations each transmit an ACK signal NACK signal the downlink common channel to said base station through the uplink dedicated channel an uplink random access channel, and said base station decreases said offset when the ACK signal is received a plurality of times consecutively and increases said offset when the

NACK signal is received plurality of times consecutively (Para. 0119-0120, 0151, & 0168 of Sakoda et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a Negative Acknowledge (NAK) and/or Acknowledge (ACK), as taught by Sakoda et al., in a method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations (Fig. 1-3; Abstract; and Para. 0001 & 0004 of Voyer).

The motivation of this combination would be the effect of the transmission control portion acquires the information, the transmission control portion, under the control of the main control portion, instructs through the transmission-related control line the transmitted data processing portion to transmit an ACK (Acknowledgement) signal to the base station. The transmitted data processing portion multiplexes the transmission ACK signal together with the transmitted data (Para. 0119-0120, 0151, & 0168 of Sakoda et al.).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle N. Young whose telephone number is (571) 272-2836. The examiner can normally be reached on Monday through Friday: 8:30 am through 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JNY
June 1, 2006

NAY MAUNG
SUPERVISORY PATENT EXAMINER